

THE SAXOPHONE MUSIC OF JACOB TER VELDHUIS:  
A DISCUSSION OF *PITCH BLACK*, *GARDEN OF LOVE*, AND *BUKU*

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## ABSTRACT

The purpose of this document is to examine the role of Jacob ter Veldhuis' music in the saxophone community. His music is frequently programmed on recitals, but has received limited scholarly attention at this point. This document is based on readings of the available relevant literature, an interview with the composer to explore his musical influences and unique aesthetic, and original musical analysis.

The paper was primarily created for a lecture recital and focuses on his saxophone works *Pitch Black*, *Garden of Love*, and *Buku*. Specific compositional devices will be discussed in addition to performance considerations for each piece. The paper examines important influences on the creation of this music including musique concrète, early electronic minimalism, hip hop, jazz, and American pop culture.

The ultimate goal of this project is to provide saxophonists an introduction into the workings behind ter Veldhuis' music and to make players of various backgrounds aware of a repertoire that combines many qualities of saxophone sound that are more typically divided into different genres.

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## DEDICATION

To my parents Zeb and Emily. Thank you for your encouragement  
in all of my musical pursuits from the very beginning.

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## INTRODUCTION

Saxophone repertoire has been blessed with a steady growth of interest from composers over the past century. Though the instrument was not immediately popular with composers of art music its technical capability has lent itself well to more recent compositional trends. Few other instruments can match the expressive, dynamic, technical, and timbral flexibility of the saxophone with as much ease. This increase in repertoire can also be linked to saxophonists' willingness to play new literature because of the comparatively smaller body of classic repertoire for the instrument.

One of the most prolific contributors to this repertory is Dutch composer Jacob ter Veldhuis. Though primarily heard on classical recitals and on recordings of classical saxophonists, his music can't simply be labeled "classical." His incorporation of a variety of styles featuring the vast capabilities of the saxophone has garnered interest from a wide range of listeners and performers but has received limited scholarly attention. This document will explore his musical influences and unique aesthetic. Analysis of his saxophone works *Pitch Black*, *Garden of Love*, and *Buku* will also be included. Specific compositional devices will be discussed in addition to performance considerations for each piece. The ultimate goal of this project is to provide saxophonists with an introduction into the workings behind ter Veldhuis' music and to make players of various backgrounds aware of a repertoire that combines many qualities of saxophone sound that are more typically divided into different genres.

The saxophone has been an important instrument in three distinct areas: classical, jazz, and popular music. The adoption of the saxophone as a classical instrument was a gradual process. It rose to higher prominence in classical music in concurrence with the development of jazz. Saxophone players can be seen at the forefront of many important stylistic developments of



the latter genre; notable examples include Lester Young, Coleman Hawkins, Charlie Parker, John Coltrane, Ornette Coleman, and Wayne Shorter. Since the advent of rock music in the 1950s, the saxophone has remained an important voice in popular music as well. This can be witnessed in prominent saxophone solos in many hits over the past six decades from the likes of Maceo Parker of James Brown's band, Clarence Clemmons of Bruce Springsteen's band, and Bobby Keyes who performed with the Rolling Stones. It is the most commonly heard wind instrument in popular music, and this may keep its use in classical music largely overlooked by the general public. Jacob ter Veldhuis combines elements from all of three genres together in his works for saxophone, which are a key focus of his compositional output.

For a contemporary saxophonist or saxophone student the varying approaches to sound that have developed through the very different pathways of classical, jazz, rock, and pop present a number of challenges in how to cultivate one's own approach to the instrument. For instance, a saxophonist must be adept in improvisation in order to be a jazz musician but this is not so critical for a classical musician. Each genre also carries a unique aesthetic appeal to both performer and listener. There is also a fundamental difference in proper sound (timbre) that is desired. For example, an ideal classical tone is clear and warm while a rock tone typically sounds raspy and bright. While there are certainly some who can adapt to each genre, many saxophonists specialize in one medium and aren't likely to stray much during their career. A world-renowned expert in jazz may sound out of place in a classical setting and vice versa. This is not necessarily a technical issue, theoretically saxophonists ought to be able to play fluidly between these styles with the same embouchure, but they tend not to.

Ter Veldhuis' music blurs these lines and he is therefore a crossover artist/composer and writes music that can be played by musicians from a variety of backgrounds. His music provides

an important link between classical, pop, and jazz music. Branford Marsalis is perhaps the most prominent crossover artist (playing in both jazz and classical worlds) to have performed ter Veldhuis' saxophone music. He played the *Tallahatchie Concerto* (2001) with the Cincinnati Symphony Orchestra in 2012.<sup>1</sup>

Of his twenty-seven works for saxophone twenty-one are written with a fixed media audio component. Live performance with electronic accompaniment is a defining feature of his music. The composer's collage-like music contains relatable material to many ears and can serve as an appealing challenge to any saxophonist willing to diversify a program with a multi-media component. Use of multi-media also helps to effectively communicate a message to an audience with wide-ranging backgrounds.

Ter Veldhuis' compositions are becoming more frequently performed in classical music settings. Over the past decade several prominent classical soloists and quartets have dedicated entire albums to his work. In addition, ter Veldhuis' music has grown in popularity at a time in which many saxophonists need to diversify their repertoire in order to maintain a successful career. This is especially evident in university or conservatory settings which are largely responsible for the establishment and perpetuation of classical saxophone performance. Degree plans focus students' efforts on classical performance, often culminating in a recital of standard repertoire for the instrument.

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<sup>1</sup> Janelle Gelfand, "Branford Marsalis Shows Classical side," *Marsalis Music*. November 25, 2012, Accessed April 18, 2016. <http://www.marsalismusic.com/news/branford-marsalis-shows-classical-side>.

## ELECTRONIC MUSIC OVERVIEW

The fixed media created by ter Veldhuis are entirely made up of sampled sounds.<sup>2</sup> His sound sources include musical instruments, birds, jazz recordings, and the human voice. Before delving into ter Veldhuis' compositional practices, it is helpful to examine some trends in early electronic music.

The ability to record and manipulate sound was crucial in the development of electronic music. While wire recorders were on the verge of a rapid decline in the late 1940s,<sup>3</sup> magnetic tape soon gained immense popularity in the recording industry due to quality, convenience, and cost-effectiveness.<sup>4</sup> Composers also began to use it for the production of electronic music.

The practice of sampling real-life sounds for the purpose of producing music dates back to Egyptian-American composer Halim El-Dabh and his piece *Ta'abir al-Zaar* (1944). He manipulated overtones from a recording of women chanting during a Zaar healing ritual in Cairo. Though considered a pioneering piece of electronic music today, the composer didn't think of it as such; rather, as "just as an experience." His wire recording equipment was borrowed from the local Middle East Radio station.<sup>5</sup>

The next important innovations came four years later, from Pierre Schaefer, whose work was also supported by a radio station. He received funding and studio space from the Radiodiffusion-Télévision Française, where he and composer Pierre Henry pioneered tape music

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<sup>2</sup> Jacob ter Veldhuis, "Lecture Recital," Interview by Zachary Pischnotte, March 13, 2016.

<sup>3</sup> David Morton, "Wire Recorders: Sound on Steel Wire," *The History of Sound Recording*, Accessed April 7, 2016. [http://www.recording-history.org/recording/?page\\_id=2016](http://www.recording-history.org/recording/?page_id=2016).

<sup>4</sup> David Morton, "The Era of Tape Recording," *The History of Sound Recording*, Accessed April 7, 2016. [http://www.recording-history.org/recording/?page\\_id=2081](http://www.recording-history.org/recording/?page_id=2081).

<sup>5</sup> Fari Bradley, "Halim El Dabh: An Alternative Genealogy of Musique Concrète," *Ibraaz Essays* 9, no. 5 (2015): 3, Accessed April 7, 2016. [http://www.ibraaz.org/essays/139/#\\_ftn3](http://www.ibraaz.org/essays/139/#_ftn3).

composition. Schaefer's *Etude aux Chemins de Fer* (1948) is credited as one of the first works in this genre.<sup>6</sup>

Tape composition was the central method of Schaeffer's electronic composition philosophy of *musique concrète*, in which pre-recorded media was the sole basis for his pieces. In addition to tape splicing, the only techniques that practitioners of early *musique concrète* could use to transform original recordings were transposition (achieved by changing the speed of playback), looping, cutting sounds into fragments, rearranging, filtering, flanging, layering, and playing the sound backward. A variety of tape recording and playing machines were designed to facilitate these techniques.<sup>7</sup> The fixed media used in ter Veldhuis' works studied in this document employ techniques of *musique concrète* and rely mostly on the aforementioned processes.

Technological developments are central to the history of electronic music.<sup>8</sup> The equipment used in the middle of the 20<sup>th</sup> century was costly and the process was very labor-intensive and time-consuming; thus, composers relied on public funds and required specialized workspaces to create their music. It was very much a physical process that involved cutting the magnetic tape with a razor blades and splicing it into place. The same results can now be achieved on a composer's personal computer using audio editing software. This practice became affordable in the mid-1990s at about the same time that ter Veldhuis began writing for saxophone and electronics.<sup>9</sup>

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<sup>6</sup> Nick Collins and Julio D' Escrivan Rincón, *The Cambridge Companion to Electronic Music*, (Cambridge: Cambridge University Press 2007), 25–26.

<sup>7</sup> Daniel Teruggi, "Technology and Musique Concrète: The Technical Developments of the Groupe De Recherches Musicales and Their Implication in Musical Composition," *Organised Sound* 12 (03): 215–216. <http://search.proquest.com.www2.lib.ku.edu/docview/1552494?accountid=14556>.

<sup>8</sup> Collins and Rincón, *The Cambridge Companion to Electronic Music*, 26.

Ter Veldhuis' music also relies on more recent techniques. Steve Reich's tape experiments in the mid-1960s were an important development in both electronic music and minimalism. His *It's Gonna Rain* (1965) and *Come Out* (1966) involve playing two looped recordings of the same vocal sample played back at slightly different speeds so they fall further and further out of phase until they re-synchronize at the conclusion of the piece.<sup>10</sup> This repetition of a vocal phrase and its associated phenomena are the focal point for the compositions that most influenced ter Veldhuis.

The use of human speech samples as a part of a musical score has its roots in Scott Johnson's *John Somebody* (1980–1982) for guitar and tape loop. During the late 1970s Johnson made tape loops of speech, crying, and laughter, and eventually adopted the practice of approximating the inherent pitches and rhythms in the form of music notation. He isolates parts of the samples that are reminiscent of pop music elements, particularly syncopated rhythms. This is a defining feature of ter Veldhuis' music as well that further define the “popular” aspect of his music. Johnson also adds percussion, guitar, and winds. He details his aesthetic in the liner notes of the 1986 commercial release of *John Somebody*.

The works on this record represent my first resolution of what seemed at the time to be personal conflicts between European classical and American popular musical forms and habits. In fact, I no longer see this as either personal or a conflict. Not personal, because the reconciliation of opposing cultural forces is ultimately the business of many people. And not a conflict, because it is clear that much of the greatness of the European tradition rested in the composers' practice of drawing upon the simpler folk musics of their own time and place, while continuing to hone their own sense of technique and structure. If there is a compelling reason why this marriage of emotion and intellect can't work, then someone forgot to mention it to about 20 generations of composers.<sup>11</sup>

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<sup>9</sup> Daniel Teruggi, "Technology and Musique Concrète."

<sup>10</sup> Collins and Rincón, *The Cambridge Companion to Electronic Music*, 44.

<sup>11</sup> Scott Johnson, "John Somebody," *Scott Johnson Composer*, Accessed April 10, 2016. <http://scottjohnsoncomposer.com/compositions/johnsomebody.html>.

Johnson feels that popular music is the new folk music of our late 20<sup>th</sup> century culture in America and he relates his use of popular music idioms to Stravinsky's use of folk music in the classical context.<sup>12</sup>

The sampling technique Johnson and Reich use relies on finding a tonal or modal center of a particular phrase after several repetitions. Though human speech isn't completely pitch stable, the ear can still find musical intervals in spoken words. These tend to express a musical harmony or modality. Diana Deutsche is credited with defining and initially studying the phenomenon from a scientific perspective, which later became known as "Speech to Song Illusion" in 1995. Deutsche conducted a research project to determine the effect of repetition of a phrase on how one perceives it. The more a phrase is repeated, the more it sounds like song rather than speech.<sup>13</sup> Figure 1 is an example of a speech sample that ter Veldhuis repeats. When heard enough times, this phrase sounds as if it is in F# minor (as is reflected in the saxophone parts throughout this section).

The figure displays a musical score for five parts: Voice, Soprano Sax, Alto Sax, Tenor Sax, and Baritone Sax. The key signature is one sharp (F#) and the time signature is 4/4. The voice part at the top contains the lyrics "I would call that more cool with-out drums" and is written in a bass clef. The instrumental parts for the saxophones are written in various clefs (treble and bass) and show melodic lines that correspond to the pitch of the spoken words, illustrating the "Speech to Song Illusion".

Figure 1. Jacob ter Veldhuis, Pitch Black, m. 203.<sup>14</sup>

<sup>12</sup> Ibid.

<sup>13</sup> Diana Deutsche, "Speech to Song Illusion," *Diana Deutsch - Speech to Song Illusion*, Accessed April 10, 2016. <http://deutsch.ucsd.edu/psychology/pages.php?i=212>.

Another example of this phenomenon in live performance can be observed in Reich's piece *Different Trains* (1988). While Johnson innovated the technique of giving a speech sample a pitch relation and pairing it with live performance Reich was instrumental in bringing this medium into the public eye as well as into art music circles. He won a Grammy Award for Best Contemporary Composition in 1990 after the Kronos Quartet recorded it on Nonesuch, the same label on which Johnson released *John Somebody*. In *Different Trains* Reich also uses vocal samples to support a political and programmatic theme, in this case, a Holocaust survivor's perspective of World War II. Like Reich, ter Veldhuis' tends to make his music programmatic and even political, while following Johnson's example of adopting influences from popular music.

### PROFILE OF JACOB TER VELDHUIS

Jacob ter Veldhuis was born on November 14, 1951 in Westerlee, a small village in the northeastern Dutch province of Groningen. He grew up nearby in Winschoten and studied flute, horn, percussion, piano, and music education at the Groningen Conservatory. He eventually shifted his focus to composition, which he studied with Willem Frederik Bon, and electronic music, which he studied with Luctor Ponse. He worked as a rock musician, librarian, and teacher in his early adulthood and graduated from the conservatory in 1980. He began to attract attention for his symphonic works shortly thereafter. In 1981–1983 he wrote *Symphony No. 1* for orchestra and five percussionists, which was premiered by the Northern Philharmonic Orchestra.<sup>15</sup>

By 1984 ter Veldhuis was able to focus solely on composition. Notable works from this period are *Insonnia* (1986), *Drei Stille Lieder* (1991), and *Diverso Il Tempo* (1991), all of which

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<sup>14</sup> Jacob Ter Veldhuis, *Pitch Black*, Doorn, Netherlands: Boombox Music Publishers, 1998. All examples from this edition unless otherwise specified.

<sup>15</sup> "Veldhuis, Jacob ter," *Donemus*. Accessed April 12, 2016  
<https://webshop.donemus.com/action/front/composer/Veldhuis%2C+Jacob+ter>.

were well-received by the avant-garde at the time. In 1992, he held a position as composer-in-residence at the historic Darmstädter Ferienkurse, a career-defining venture. When asked about his tenure there, the composer replied, “Not so interesting: I did not feel at home there. I did a lecture recital which was misunderstood. But it shaped my career. After Darmstadt I knew this what not what I wanted.”<sup>16</sup> Ter Veldhuis’ biography states that he doesn’t feel “at home” in avant-garde, rock, or jazz scenes—or any of the categories in which people put him—and thus created his new brand of self-described “avant-pop” composition.

A major turning point for ter Veldhuis came with his rejection of the inordinate abstraction and dissonance that he observed amongst 20<sup>th</sup> century composers and audiences.<sup>17</sup> In the words of the composer:

From Euripides onward, conflict has been seen as a precondition for a work of art. Romanticism confirmed this viewpoint, and in the 20th century—certainly after the Second World War—art became progressively more conceptual and harder to swallow. Artists sometimes behave like preachers, shouting hell and damnation from the pulpit. Of course I'm moved by the tragedy of human failings and the suffering that results from it, but I want to sublimate this by striving for absolutely pure, unearthly and perfect mellifluousness: beauty as a drug.<sup>18</sup>

This is the philosophy behind his transition to avant-pop. Ter Veldhuis wanted to create music that served a larger audience than the “musical elite.” He makes his music easier to relate to by using samples of human speech to transmit his message in a tonal or modal context.<sup>19</sup> Examples of this musical outreach include syncopated pop rhythms, modality, repetition, singable melodies, and use of multi-media to add drums and sound effects.

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<sup>16</sup> ter Veldhuis, “Lecture Recital.”

<sup>17</sup> Galen Brown, “The Body of your Dreams: Profiling Jacob ter Veldhuis,” *Sequenza 21*, May 22, 2007, Accessed April 12, 2016. <http://www.sequenza21.com/2007/05/the-body-of-your-dreams-profiling-jacob-ter-veldhuis/>.

<sup>18</sup> Michiel Cley, “Articles,” *Jacob TV*, Accessed April 16, 2016. <http://jacobtv.net/articles.html>.

<sup>19</sup> Ibid.



Ter Veldhuis coined the term “boombox repertoire” to describe a body of work that is steeped in American pop culture with references to music, television, and current events. Specifically, African American culture is referenced by his frequent sampling of African American voices (reminiscent of Reich’s in *Come Out* and *It’s Gonna Rain*) as well as the jazz, hip hop, and funk aesthetics that he conveys in his rhythm and harmonic language. He goes as far as to specifically score his piece *Pitch Black* for saxophone quartet and “ghetto blaster.” One of his first pieces of the style of music for which he would become famous was *Le Soupirs de Rameau* (1995) for harpsichord, video, and a fixed media containing rock samples. Other compositions in this same vein produced that year were *TATATATA*, for solo cello and fixed media, and *The Storm*, for harpsichord and fixed media. Upon being asked about his commitment to this new art ter Veldhuis says “I write the music I myself want to hear. And that music did not exist.” He sets out to write accessible music that is “engaged in society.”<sup>20</sup> As stated in a New York Times review, “His boombox pieces, for recorded tape and solo instruments, are analogous to Tom Wesselmann’s slick collages, limning the outlines of larger-than-life American figures in a pop idiom.”<sup>21</sup>

This shift in compositional style came at a time in the mid-1990s in which surveys showed an emerging trend of “musical omnivores” in the upper class. Timothy Dowd uses this term to describe highly educated people who have an affinity for a wide variety of musical genres. “High-status individuals, in addition to liking classical music, also tend to like more musical genres than other listeners, and that this ‘omnivorous’ tendency has grown more

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<sup>20</sup> ter Veldhuis, “Lecture Recital.”

<sup>21</sup> Anne Midgette, “Dutch Composer Samples Pop Culture and Gives It a Melody,” *The New York Times*, 04 May 2007, Accessed February 5, 2016.  
[http://www.nytimes.com/2007/05/04/arts/music/04jaco.html?\\_r=0](http://www.nytimes.com/2007/05/04/arts/music/04jaco.html?_r=0).

pronounced over the decade.”<sup>22</sup> Perhaps this explains the early success of ter Veldhuis’ “boombox” music, which is heard primarily in art music venues.

### **Ter Veldhuis’ Saxophone Music**

*TATATATA* was arranged for tenor saxophone and baritone saxophone in 2006. Two instruments were needed in place of the solo cello because the majority of the original involves double-stops. The first piece written specifically for saxophone was *May This Bliss Never End* for cello or tenor sax, piano and fixed media (1996). The fixed media for this piece only uses samples of an interview of jazz musician Chet Baker that was done toward the end of his life. *Pitch Black* (1998) for saxophone quartet, which will be discussed later, is similar in that the only samples heard are the Baker’s voice.<sup>23</sup> He explored this same concept in the piece *Billie* (1998) for alto saxophone and fixed media, which profiles Billie Holiday, another influential jazz artist.

Many of ter Veldhuis’ compositions focus on the “seamier” side of life, particularly in American popular culture.<sup>24</sup> Representative works of this nature (that feature the saxophone) are *Heartbreakers* (1998), which includes samples from the Jerry Springer show; *Grab It!* (1999), which includes samples of prison inmates; and *Pimpin’* (2008), which includes samples of interviews with American pimps. Other works are political or religious in nature, such as *Jesus is Coming* (2003), originally written for four recorders and arranged for saxophone quartet in 2004. Ter Veldhuis states that the piece was “inspired by the post 9 -11 trauma and the role of religion

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<sup>22</sup> Timothy J. Dowd, “The Sociology of Music,” *21<sup>st</sup> Century Sociology: A Reference Handbook* Volume 2, Thousand Oaks, CA: Sage (2007), 37.

<sup>23</sup> In the more recent work, the speech sample occasionally undergoes manipulation that relies on a more recent technology—time shifting—which changes time without changing pitch. This was possible with tape manipulation and didn’t become available to composers until the mid-1990s.

<sup>24</sup> “Jacob TV: A Portrait,” *Music Center The Netherlands*, 3.

in the history of mankind: Is Jesus really coming? Isn't it about time?"<sup>25</sup> Due to the provocative language and subject matter of some of his pieces, some consider his work to be controversial. To this, he replies, "I cannot help myself. Why my work is controversial I do not know... I do know that my social engagement makes people sometimes wonder what my music is about. That is my aim. Wonder."<sup>26</sup>

As a majority of these numerous compositions include fixed media as accompaniment, ter Veldhuis' music makes up a significant portion of current music for saxophone with electronics. Though technically demanding, his music is approachable by different types of performers. The overwhelming tonal and modal harmonic language, coupled with familiar rhythmic devices, makes it easily accessible to the audience as well. Ter Veldhuis has truly cultivated an original style and his music deserves special attention from an analytical perspective.

### **PITCH BLACK**

*Pitch Black* (1998) is a fixed media work for standard saxophone quartet – soprano, alto, tenor, and baritone. It was written for the Aurelia Saxophone Quartet, a group from ter Veldhuis' native country. A CD containing the fixed media is included with a purchase of ter Veldhuis' music along with a score containing the speech samples and, if applicable, the other parts heard in the fixed media. Also included with his saxophone music is a page of preparation suggestions from saxophonist Connie Frigo.

In addition to practical considerations of working out the rhythms at full tempo before pairing the parts with the fixed media, she emphasizes the importance of following the exact

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<sup>25</sup> Jacob ter Veldhuis, "Jesus is Coming," *Jacob TV*, Accessed April 18, 2016. <http://www.boomboxshop.net/jesus-is-coming.html>.

<sup>26</sup> ter Veldhuis, "Lecture Recital."

cadence of the vocal samples rather than reading exactly what is on the page. Though not the most technically demanding of his works, it is one of the most challenging to prepare. For much of the piece, a strong pulse can't be felt in the natural rhythms of Baker's voice. A unique feature of ter Veldhuis' music is that he arranges his music around the sample, rather making the sample fit his own convention. Of three works studies here, *Pitch Black* centers the most heavily on speech rhythms. It becomes apparent to the performer that the odd meters and complex rhythms of the voice are approximated; thus, repetitive listening to the fixed media samples is needed so as to internalize and emulate the natural speech rhythm. This process is further complicated in an ensemble situation in which other individuals are responsible for putting in the same effort outside of rehearsals in order to work as a unit.

As evinced by some of the rhythmic cues mentioned, this piece sonically represents the hard life of Chet Baker. A transcript of the progression of sampled speech heard in the piece reads:

Yeah I was locked up in '62  
 It was pitch black in there you know  
 And you couldn't see anything comin' out of the sunlight  
 My eyes got used to the darkness  
 I looked around and then I saw...  
 I saw...Ooh I saw...  
 40 trumpet players in there  
 Yeah no no. Yeah no no  
 All the trumpet players in LA you know:  
 I saw Dizzy & Miles & Oh I guess Lee Morgan and all those guys you know 40!  
 40 trumpet players, no no I mean 60

I managed to survive and really that's a  
 Yeah I was locked up  
 It was pitch black in there you know  
 People are...People are...  
 Hhh but I got through it  
 I have the feeling here that uuh 's much more freedom  
 People are not so uptight about petty things  
 A permanent 24-hour party going on all year

Without drums, without drums  
 And really without drums!  
 I would call that more cool, without drums  
 Well that was it!

Yeah I was locked up in '62  
 It was pitch black in there you know  
 And you couldn't see anything comin' out of the sunlight  
 My eyes got used to the darkness I looked around  
 and then I saw...<sup>27</sup>

Table 1–5 contain formal and basic harmonic analysis of the piece. The form can largely be distinguished by sudden dramatic shifts in tempo, texture, and the words that are sampled. Portions are most easily analyzed from a modal perspective and many harmonies are non-functional; thus, the dominant modality is applied to each section of the piece (See Tables 1–5).

Ter Veldhuis derives his key centers from the pitch of the voice. When analyzing the contour of the first three measures of the vocal part, it appears to be centered on E. The alto and baritone play similar pitches ter Veldhuis has notated for the phrase “was pitch black” for their opening notes, the tenor plays a diatonic fifth above the baritone, and the C# and B in the soprano imply the Dorian mode (See Figure 2).

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<sup>27</sup> ter Veldhuis, *Pitch Black*.

Figure 2 shows a musical score for measure 3 of 'Pitch Black' by Jacob ter Veldhuis. The score is in 4/4 time. The staves are: Voice 1 (Bass clef), Voice 2 (Bass clef), Soprano Sax (Treble clef), Alto Sax (Bass clef), Tenor Sax (Bass clef), and Baritone Sax (Bass clef). The lyrics for Voice 1 are 'two Was pitch black in there you know'. The lyrics for Voice 2 are 'u u u u'. The saxophones play a rhythmic ostinato pattern.

Figure 2. Jacob ter Veldhuis, *Pitch Black*, m. 3.

The next vocal phrase, “and you couldn’t see anything,” consists solely of an F# major triad. When this phrase is first heard, the saxophones change to a different rhythmic ostinato and key center. It is listed in the analysis table as F# major/minor because of a discrepancy between the tenor and baritone. This could be because of the imprecise nature of Baker’s speech (See Figure 3).

Figure 3 shows a musical score for measure 25 of 'Pitch Black' by Jacob ter Veldhuis. The score is in 4/4 time. The staves are: Voice (Bass clef), Soprano Sax (Treble clef), Alto Sax (Bass clef), Tenor Sax (Bass clef), and Baritone Sax (Bass clef). The lyrics for the Voice are 'And you could - n't see a - nything And'. The saxophones play a rhythmic ostinato pattern.

Figure 3. Jacob Ter Veldhuis, *Pitch Black*, m. 25.

The mood of the text is often reflected in the music. The opening line of the text is a reference to time Baker spent in European prisons for drug charges.<sup>28</sup> While the next three lines sound as if he is further describing his experience in prison, in the context of the interview, he is in fact detailing a live audition for Charlie Parker in Los Angeles. The 8<sup>th</sup>–11<sup>th</sup> lines of text are from a later part of the interview in which Parker tells all of his trumpet-playing friends in New York about Baker's talent.<sup>29</sup> For the first stanza of text the saxophone parts remain very active and mostly staccato.

The next stanza, which starts in measure 98, marks a dramatic shift in style. This is a triumphant yet solemn part of the piece. The interview was conducted on New Year's Eve in 1987 and Baker brings up the fact that he "managed to survive" as a highlight of the year. When this phrase is introduced, the soprano plays virtuosic lines over the chorale-like lower parts. The saxophones return to unison long notes (in measure 111) when the phrase "I was locked up" is reintroduced. In measures 117–128, he mentions that there is "much more freedom" in Holland than many other European countries he has visited. At this point the music seems to take on a more optimistic character.<sup>30</sup>

Section III is clearly marked by a shift in texture as all saxophones are directed to produce a percussive effect. It is indicated in Dr. Frigo's performance notes to produce more "sound" and tone, and thus a slap-tongue effect may be necessary. In measure 165 Baker continues to speak about Holland and how people are "not so uptight about petty things."<sup>31</sup> This

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<sup>28</sup> Robinson, J. Bradord, *The New Grove Dictionary of Jazz*. 1<sup>st</sup> ed., s.v. "Baker, Chet," (London: Macmillan, 1988), 53.

<sup>29</sup> Don Kaart, "Chet Baker - Last Interview - Amsterdam, December 31, 1987," YouTube, December 20, 2014, Accessed April 18, 2016. <https://www.youtube.com/watch?v=R43ksFy1Ge4>.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid.

is the first instance of the saxophones imitating the exact rhythms of Baker's voice, perhaps because it appears to be a distinct syncopated rhythm found in pop music (See Figure 4).

The musical score for Figure 4 consists of six staves. The top two staves are for voices, and the bottom four are for saxophones. All staves are in 4/4 time. Voice 1 has a syncopated melody with the lyrics 'pe a pe a pe a pe a pe a pe a pe a pe a'. Voice 2 has a similar syncopated melody with the lyrics 'a - bout pet-ty things'. The four saxophone staves (Soprano, Alto, Tenor, and Baritone) all play a similar syncopated rhythm, imitating the voice parts. The saxophone parts are written in a way that suggests they are imitating the exact rhythms of the voices.

Figure 4. Jacob Ter Veldhuis, *Pitch Black*, mm. 168–169.

Measures 210–222 focus on Baker's cough, heard throughout the interview, which suggests the toll his addictions have taken on his body. It is heard relentlessly on beats two and four expressing a typical backbeat. Other Jazz idioms can easily be found in these works. In *Pitch Black* examples can be heard in the walking basslines of the baritone, the improvisatory solos in the soprano, and the soli-style voicings of the saxophones in measure 210–220.

Another reference to American culture can be heard in a sampling technique heard several times in this work. The first instance is in measure 42–43 when “I looked around” is preceded with eight repetitions of “I loo” (See Figure 5). This is reminiscent of a scratching technique heard in the work of many hip hop DJs and pioneered by DJ Theodore in 1981.<sup>32</sup> The familiar technique involves the first bit of a word or phrase repeated, or scratched over, many times and eventually allowing the rest of the phrase to sound. One example can be heard

<sup>32</sup> Sophy Smith, *Hip-hop Turntablism, Creativity and Collaboration*, (Farnham, Surrey: Ashgate, 2013), 45.



throughout the composition “Eric B. Is President” from Eric B. and Rakim’s 1987 release *Paid in Full*.<sup>33</sup>

The musical score for Jacob Ter Veldhuis's "Pitch Black" (mm 42-43) consists of five staves. The top staff is for Voice, with lyrics: "I loo I loo I loo I loo I loo I loo I loo I loo I loo I looked a-round and then I saw my". The four saxophone staves (Soprano, Alto, Tenor, and Baritone) show melodic lines. The Soprano, Alto, and Tenor staves have dynamics marked 'f' (forte) and 'p' (piano). The Baritone staff also has dynamics marked 'f' and 'p'.

Figure 5. Jacob Ter Veldhuis, *Pitch Black*, mm 42–43.

Hip hop culture influences in ter Veldhuis’ “boombox” aesthetic are also expressed in other ways. In the scores for some of his fixed media works that state specifically that they are to be played with a “ghetto blaster” as accompaniment, a PA system is listed as a secondary option. His commitment to this aesthetic can be seen in a video in which a cellist René Berman performs *TATATATA*. Ter Veldhuis accompanies the cellist onto the stage holding a boombox, presses play, and leaves the stage.<sup>34</sup> To completely achieve ter Veldhuis’ aesthetic an actual boombox should be used for performance if available.

The primary issue in putting together *Pitch Black* is how to remain synchronized with the fixed media playback. The first sense of consistent, strict pulse is in measure 35 when the sound written as “ndyc” is repeated in eight successive eighth notes. A similar idea appears in measure 40 when “I loo” from the phrase “I looked around” occurs on each strong beat of the

<sup>33</sup> Eric B. and Rakim, *Paid in Full*, 4<sup>th</sup> and Broadway, CCD 4005, 1987.

<sup>34</sup> JACOBTV, "JacobTV – Tatatata," YouTube, July 22, 2008, Accessed April 12, 2016. [https://www.youtube.com/watch?v=QzeKM\\_EaXug](https://www.youtube.com/watch?v=QzeKM_EaXug).

measure. Before this point the performers must rely on other cues in the music to ensure that they are in synchronization with the recording. The most obvious is the guttural “u u u u” sound found at the beginnings of measures. It is always accompanied by a prominent cough on the third sixteenth note.

In the next major section of the piece, there are tempo changes in measures 66, 72, and 76. Each is preceded by an anacrusis in the vocal part before the saxophones enter. If each musician has a clear understanding of each tempo these changes aren’t a major concern. The next tempo change, in measure 129, is slightly more difficult because the pickup note is a 16<sup>th</sup> note at 92 beats per minute. An empty measure is given with the pickup note so that the performers can count in the new tempo; therefore, it cannot be emphasized enough that the tempi must all be internalized by each musician. The tempo slows to 72 beats per minute in measure 200. In addition the notation of the speech rhythms is not always precise. Though not all of the speech can be felt in exact time, the pulses are often very strong. For instance, the word “cool” is consistently heard on beat three in measures 203–209, and a raspy cough is heard on beat 2 and 4 in measures 210–223. The original tempo of 96 beats per minute returns in measure 236 and a clearly audible breath that lasts for a dotted quarter note at 72 beats per minute serves as a pickup so the new tempo must be anticipated.

### **GARDEN OF LOVE**

*Garden of Love* (2002) was written for oboist Bart Schneemann and arranged a year later for soprano saxophone. This piece represents a side of ter Veldhuis’ body of work that delivers a strong message but isn’t as rooted in American culture; it serves as a commentary on Christian influence over human behavior. The sampled text is from an articulate narration of a poem by English poet William Blake in 1794 from his *Songs of Experience*. A transcript is below:

I went to the Garden of Love,  
And saw what I never had seen:  
A Chapel was built in the midst,  
Where I used to play on the green.

And the gates of this Chapel were shut,  
And ‘Thou shalt not.’ writ over the door;  
So I turned to the Garden of Love  
That so many sweet flowers bore.

And I saw it was filled with graves,  
And tombstones where flowers should be;  
And Priests in black gowns were walking their rounds,  
And binding with briars my joys & desires.<sup>35</sup>

The progression of the piece follows that of the poem. In addition to vocal sample, ter Veldhuis uses samples of bird songs that he either took from recordings or gathered himself from the Dutch countryside. Other instruments heard are sampled harpsichord, oboes, strings, and percussion. See Tables 6–9 for analysis.

Like *Pitch Black*, the modal harmony is dictated by the natural pitch of the sampled materials, this time with the addition of a wide variety of bird sounds. There are even moments when the saxophone is meant to imitate a “duck sound” with a slap tongue (mm. 179–183) as well as moments of altissimo register to put the saxophone closer to range of the bird call (mm. 200–214). Both of these sections are reflected in the form of the piece. There are no vocals during either segment, and both occur near the most striking imagery in the poem. “‘Thou Shalt Not’ writ over the door” is heard just before measure 179, and measure 214 leads into the phrase “And I saw it was filled with graves.” Birds and human speech are rarely heard concurrently, and both have equal influence over the melodic content.

Measure 46 contains alternating E minor and E7 arpeggios, an example of modal mixture that was also present in *Pitch Black*. The vocal part is introduced in the next measure, and all

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<sup>35</sup> Jacob ter Veldhuis, *Garden of Love*, Doorn, Netherlands: Boombox Music Publishers, 2002. All examples from this edition unless otherwise specified.

eight syllables of the first lines contain only the notes of E and B, and the saxophone settles on E Dorian.

The saxophone begins a syncopated pattern that appears to be repetition, but upon closer inspection it is clear that there is no repeated figure, but simply the illusion of repetition. At this point it is worth recalling that ter Veldhuis' music contains many elements of minimalistic music but the absence of exact repetition over a long period indicates that he is simply borrowing from the aesthetic of minimalism to contribute to his musical collage. An example of this can be observed in Figure 6.



Figure 6. Jacob Ter Veldhuis, *Garden of Love*, mm. 90–92.<sup>36</sup>

This piece includes several examples of the speech being sped up or slowed down to fit the character of the piece, as in the first few measures in which the voice is heard. Sections are marked in this piece by a long held out word from the vocal sample, a digital processing technique called *time shifting*. Measures 134–139 begin with the scratching technique discussed earlier (see figure 7).



Figure 7. Jacob Ter Veldhuis, *Garden of Love*, mm. 134–139.

Measures 200–215 contain the closest semblance of birdsong. Prior to this point birds served as a tonal reference and were trimmed to fit the tempo and rhythm of the piece but this

<sup>36</sup> Ibid.

passage requires the saxophone to mimic the rhythms as they naturally occurred when ter Veldhuis recorded them. This is reminiscent of the aesthetic of Messiaen, who would transcribe a birdsong and have instruments imitate it exactly. Ter Veldhuis captures both contrived and natural settings for his bird songs in this piece. Measures 200–201 are in E Aeolian and strict tempo; measure 202 is less straightforward both modally and rhythmically, and requires complicated notation. The bottom line shows the rhythm and pitch of the bird sample and the top is the saxophone (see figure 8).

Soprano Sax

Birds



The image shows two staves of music. The top staff is labeled 'Soprano Sax' and the bottom staff is labeled 'Birds'. Both staves are in 2/4 time and contain a sequence of notes and rests, with some notes marked with a sharp symbol (#).

Figure 8. Jacob Ter Veldhuis, *Garden of Love*, mm. 134–139.

The use of text painting is an important feature in *Garden of Love*. The piece begins with optimistic major sonorities for the lyrics “I went to the garden of love” but as the stanza progresses and the chapel is mentioned the rhythms and meter become much more irregular. The next stanza becomes more unstable culminating in “And ‘thou shalt not’” with striking minor sounds. The end of the stanza, “So I turned to the garden of love that so many sweet flowers bore” returns to a major mode but maintains rhythmic complexity. This is followed by the atmospheric section with birdsong leading into “And I saw it was filled with graves,” the most dissonant and angular part of the piece (see figure 9).

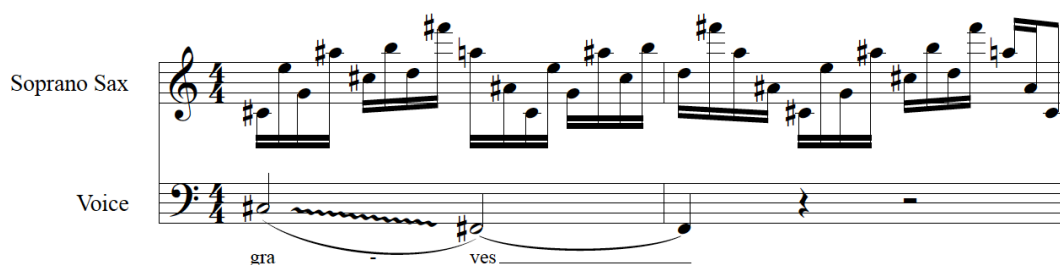


Figure 9. Jacob ter Veldhuis, *Garden of Love*, mm. 216–217.

In *Pitch Black* ter Veldhuis embraces the raspy quality of Baker's voice. He uses technology to add a similar edge to the voice in *Garden of Love* at the ends of phrases where the samples are elongated. Though *Pitch Black* and *Garden of Love* share many features there are some contrasts as well. The pitch and rhythmic content of *Garden of Love* is drastically different than that of *Pitch Black* because of the way the narrator approaches the text. He speaks as a performer would with a rhythmic feel and inflections that reflect the meter of the poem. It is fairly easy to discern his pitches, and his range is from C2 (at the very end of the piece) to A3 (on the second syllable of the poem). Chet Baker speaks in a much more casual way, and it is reflected in irregularity of the rhythmic notation of his speech. His range in these clips is C2–F#3.

## BUKU

*Buku* (2003) is scored for alto saxophone and fixed media and was written for Arno Bornkamp. It offers the performer a chance to play alongside jazz icons. The piece begins with an interview of Charlie Parker by fellow alto saxophonist Paul Desmond. It reads as follows:

Parker: I don't remember precisely. I just know he was playing, what you might call, in the vernacular of the streets, a buku of a horn, you know?

Desmond: Buku?

Parker: Yeah...

Desmond: Okay.

Parker: You know, just like all the horns packed up in to one, you know.<sup>37</sup>

The saxophone soloist plays along with Parker's words while a saxophone on the fixed media—presumably produced by a sampler instrument—repeats what the soloist plays one beat behind. The other instruments heard on the fixed media are a bass usually playing the roots of chords at the beginnings of measures, and a drum kit playing sparsely. Though most of the samples are from alto saxophone icons Charlie Parker, Cannonball Adderley, and Art Pepper the tempo and initial key center come from the opening words of the interview material. Ter Veldhuis uses the syllables “I,” “don’t,” and “mem” as beats 1, 2, and 3 of the second measure, and the saxophone plays the same pitches as the voice. See Tables 10–14 for an analysis.

As with the other two pieces it is critical to carefully study the fixed media audio of *Buku* when preparing the piece. As swing eighth notes are difficult to capture with conventional notation many rhythms are approximated and are sometimes played simultaneously with the samples. The swing feel is an important stylistic performance convention of jazz and part of the challenge of this work is assimilating that style. It is something that must be felt rather than read from the score. The same can be said for timbre and vibrato. The composer's intention is for the piece to be approached from a jazz-oriented standpoint. “*Buku* was also an attempt to seduce classical musicians to be inspired by jazz and communicate with three jazz giants in a musical dialogue.”<sup>38</sup>

While *Buku* appears to be much simpler conceptually than the previous works discussed, the audio component is very complex and involves many layers of sampled saxophones in addition to the saxophone soloist. This is usually in the form of the echo mentioned in the

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<sup>37</sup> Jacob ter Veldhuis, *Buku*, Doorn, Netherlands: Boombox Music Publishers, 2006.

<sup>38</sup> ter Veldhuis, “Lecture Recital.”

analysis and the result can sometimes be quite strident and cacophonous. For example, measures 223–227 contain scoops into almost every note and instead of playing one beat behind the echo is a single eighth note behind. This also adds a level of difficulty in performing the piece. The lack of rests in this particular section may call for circular breathing if the performer is able. This will enhance the effect of constant noise that serves as the climax of the piece.

### CONCLUSION

Jacob ter Veldhuis' music deserves of the level of attention it has received in the saxophone world and beyond. Though some criticized his music as existing for merely shock value, its deep level of craft proves that it is much more than this.<sup>39</sup> His experience as a rock musician together with his classical training come together in a cross-over genre of “boombox” music that continues to intrigue musicians and their audiences alike. His frequent references to popular culture keep his music relevant and relatable. His interest in the degree to which contemporary culture is steeped in media can be heard in his sometimes ostentatious editing of sound clips over popular music sonorities in a classical performance setting. Though his saxophone music is almost exclusively performed by those who identify as classical musicians it is clear that it was not designed merely for this narrow of a range of musicians or listeners. He has created a repertoire for saxophonists of many backgrounds and approaches who seek to play music that explores the many capacities of the instrument without limitations of genre.

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<sup>39</sup> “Jacob TV: A Portrait,” *Music Center The Netherlands*, 4.



## APPENDIX A: ANALYSES

Table 1. *Pitch Black Section I, mm. 1–65*

| Section    | Measures | Speech                                                                             | Texture/Performance Notes                                    | Modality         |
|------------|----------|------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------|
| A          | 1–24     | “Yeah I was locked up in 62, It was pitch black in there you know”                 | 96 bpm; staccato; mostly homophonic                          | E Dorian         |
| Transition | 25–30    | “And you couldn’t see anything”                                                    | Charleston rhythm in upper saxes; rhythmic ostinato in bari  | F# Dorian/Ionian |
| B1         | 31–43    | “My eyes got used to the darkness, I looked around, And you couldn’t see anything” | Bassline in bari; homophonic upper saxes                     | F# Dorian        |
| B2         | 44–54    | “My eyes got used to the darkness, I looked around, And you couldn’t see anything” | Bass line in bari; homophonic upper saxes                    | F# Dorian        |
| Transition | 55–65    | “I saw, oh, forty trumpet players”                                                 | In line with voice; legato for “I saw,” staccato for “Forty” | C Dorian         |

Table 2. *Pitch Black Section II, mm. 66–129*

| Section | Measures | Speech                                                                 | Texture/Performance Notes                 | Modality                |
|---------|----------|------------------------------------------------------------------------|-------------------------------------------|-------------------------|
| A1      | 66–70    | “Yeah, no”                                                             | 80 bpm; staccato eighth notes, homophonic | Eb Dorian               |
| A2      | 71–77    | “Yeah, no”                                                             | 66 bpm; staccato eighth notes, homophonic | Eb Dorian               |
| B1      | 78–89    | “Dizzy and Miles”                                                      | Mixed meter; homophonic                   | Gb Mixolydian/Eb Dorian |
| B2      | 90–97    | “Forty trumpet players”                                                | Staccato; more polyphony, saxes in teams  | Eb Dorian               |
| C1      | 98–104   | “I managed to survive”                                                 | Legato; chordal homophony                 | G Aeolian               |
| C2      | 105–120  | “And that’s really, Yeah I was locked up, Was pitch black, People are” | Legato; interlocking ostinati             | Bb Aeolian              |
| C3      | 121–129  | “Got through it, Much more freedom”                                    | Legato; interlocking ostinati             | F Phrygian              |

Table 3. *Pitch Black Section III: mm. 130–200*

| Section      | Measures | Speech                                         | Texture/Performance Notes                               | Modality      |
|--------------|----------|------------------------------------------------|---------------------------------------------------------|---------------|
| A1           | 130–144  | “Pe, uh”                                       | 92 bpm; syncopated slap tonguing                        | Ab Mixolydian |
| A2           | 145–164  | “Pe, uh, all, my, deep”                        | Saxes follow pitches of voice; homophonic               | Eb Dorian     |
| A3           | 165–172  | “People are not so uptight about petty things” | Saxes follow pitches of voice; syncopated slap tonguing | Eb Dorian     |
| B            | 173–180  | “Permanent 24-hour party”                      | Legato; interlocking ostinati                           | C Aeolian     |
| Transition   | 181–185  | “Without drums”                                | Short tenor and bari hits; full vocal phrases           | Eb Aeolian    |
| C            | 185–189  | “Without drums”                                | Staccato; tenor melody                                  | Eb Mixolydian |
| Interruption | 190–193  | “Eh, all, eh, di”                              | Teams of SA and TB                                      | Ab Mixolydian |
| C            | 194–197  | “Without drums”                                | Staccato; tenor melody                                  | Eb Mixolydian |
| Transition   | 198–200  | “Without drums”                                | Short tenor and bari hits; full vocal phrases           | Eb Aeolian    |

Table 4. *Pitch Black Section IV: mm. 201–235*

| Section    | Measures | Speech                                      | Texture/Performance Notes                           | Modality      |
|------------|----------|---------------------------------------------|-----------------------------------------------------|---------------|
| Transition | 201–202  | “K, foo, a, all, are”                       | 72 bpm; staccato; polyphonic; interlocking ostinati | F# Ionian     |
| A          | 203–209  | “I would call that more cool without drums” | Syncopated; rhythmic ostinato; stacatto             | F# Aeolian    |
| B          | 210–222  | Coughing, “Without drums”                   | Growling and falling ATB; growled soprano melody    | Eb Dorian     |
| C          | 223–231  | “I would call that more cool without drums” | Swing; polyphonic; improvised-sounding soprano      | Eb Mixolydian |
| Transition | 232–235  | Coughing                                    | Short tenor and bari hits; full vocal phrases       | Eb Dorian     |

Table 5. *Pitch Black Section V (Restatement of Section I): mm. 236–285*

| Section | Measures | Speech                                                                             | Texture/Performance Notes                 | Modality  |
|---------|----------|------------------------------------------------------------------------------------|-------------------------------------------|-----------|
| A       | 236–256  | “Yeah I was locked up... It was pitch black in there”                              | 96bpm; staccato; mostly homophonic        | E Dorian  |
| B       | 257–271  | “I looked around, My eyes got used to the darkness, And you couldn’t see anything” | Bass line in bari; homophonic upper saxes | F# Dorian |
| C       | 272–285  | Recording of Chet Baker playing “My Funny Valentine”                               |                                           |           |

Table 6. *Garden of Love Section I: mm. 1–83*

| Section | Measures | Sample                                       | Texture/Performance Notes                                                           | Modality                   |
|---------|----------|----------------------------------------------|-------------------------------------------------------------------------------------|----------------------------|
| A1      | 1–19     | Birds                                        | Staccato; saxophone lines up with harpsichord and birds                             | Ambiguous, mostly E Dorian |
| A2      | 20–27    |                                              | Staccato; harpsichord provides harmony to saxophone line; syncopated birds and oboe | E Mixolydian/Dorian        |
| A3      | 28–40    |                                              | Staccato; ostinato with imitation                                                   | E Dorian                   |
| A2      | 41–46    |                                              | Staccato; harpsichord provides harmony to saxophone line; syncopated birds and oboe | E Mixolydian/Dorian        |
| B1      | 47–52    | “I went to the garden of love”               | Near constant staccato 16ths; repetition of full vocal phrase                       | E Dorian                   |
| B2      | 53–57    | “And Saw”                                    | Staccato; rhythmic/melodic ostinati                                                 | G Mixolydian               |
| B3      | 58–62    | “And saw what I never had seen”              | Staccato; rhythmic ostinato; irregular melodic repetition                           | E Ionian                   |
| A2      | 63–70    | “S”                                          | Staccato; harpsichord provides harmony to saxophone line; syncopated voice and oboe | E Mixolydian/Dorian        |
| A3      | 71–77    |                                              | Staccato; rhythmic/melodic ostinati                                                 | E Dorian                   |
| B1      | 78–83    | “I went to the garden of love, LOVE cadence” | Near constant staccato 16th; repetition of full vocal phrase                        | E Dorian/A Ionian cadence  |

Table 7. *Development of Section I, mm. 84–129*

| Section     | Measures | Speech                               | Texture/Performance Notes                                 | Modality                      |
|-------------|----------|--------------------------------------|-----------------------------------------------------------|-------------------------------|
| Development | 84–94    | “I went to the garden of love, LOVE” | Mixture of elements from A3 and B2                        | F Ionian, E Ionian, B Aeolian |
| Transition  | 95–100   | “I went”                             | Staccato; rhythmic/melodic ostinato; minimalism           | D Dorian                      |
| B           | 101–111  | “Love”                               | Long string chords; legato melody                         | C# Aeolian                    |
| A3          | 112–114  |                                      | Staccato; rhythmic/melodic ostinato; imitation            | C# Ionian                     |
| B2          | 115–120  | “And saw”                            | Staccato; rhythmic/melodic ostinati                       | F# Mixolydian                 |
| B3          | 121–125  | “And saw what I never had seen”      | Staccato; rhythmic ostinato; irregular melodic repetition | E Ionian                      |
| Transition  | 126–129  | “Seen”                               | Declamatory saxophone over long string chord              | F# Dorian                     |

Table 8. *Garden of Love Section II: mm. 130–192*

| Section          | Measures | Speech                                  | Texture/Performance Notes                                  | Modality            |
|------------------|----------|-----------------------------------------|------------------------------------------------------------|---------------------|
| A1               | 130–145  | “A chapel was built in the midst”       | Sudden shifts between staccato and legato                  | F# Aeolian          |
| A2               | 146–159  | “Where I used to play on the green”     | Sudden shifts between staccato and legato                  | F# Ionian           |
| A3 (from Part 1) | 160–162  |                                         | Staccato; rhythmic/melodic ostinato; imitation             | F Ionian            |
| B                | 163–174  | “And the Gates, Writ over”              | Mixed meter; disjunct                                      | F Ionian, F Aeolian |
| B2               | 175–178  | “And that shalt not writ over the door” | Mixed meter; disjunct                                      | E minor             |
| Transition       | 179–189  | “A, le, there, ta, a, se, bo, tim”      | Syncopated staccato saxophone over bird and voice ostinati | F# sus              |
| Transition       | 190–192  | “So I turned to the garden”             | Repeated flourishes                                        | E Ionian            |

Table 9. *Garden of Love Section III: mm. 193–252*

| Section | Measures | Speech                                                           | Texture/Performance Notes                                                      | Modality           |
|---------|----------|------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------|
| A1      | 193–199  | “Love that so many sweet flowers bore”                           | Long string chords; legato saxophone melody                                    | F Aeolian          |
| B1      | 200–215  | Birds                                                            | Long string chords; bird song                                                  | E Aeolian          |
| C       | 216–219  | “And I saw it was filled with graves”                            | String hemiola ostinato under angular saxophone line of 16 <sup>th</sup> notes | B harmonic minor/E |
| C2      | 220–225  | “And tombstones where flowers should be and priests in black...” | Quarter note string hits; arpeggiated saxophone 16 <sup>th</sup> notes         | G Ionian           |
| A2      | 226–229  | “Gowns”                                                          | Long string chords; legato saxophone melody                                    | Bb minor           |
| C2      | 230–231  | “Were walking”                                                   | Quarter note string hits; arpeggiated saxophone 16 <sup>th</sup> notes         | G Ionian           |
| A3      | 232–233  | “Their rounds”                                                   | Long string chords; legato saxophone melody                                    | Bb minor           |
| D       | 234–245  | “Love that so many sweet flowers bore”                           | Long string chords; rhythmic harpsichord; legato saxophone melody              | Eb Ionian          |
| B2      | 246–252  | Birds                                                            | Birdsong over pedal                                                            | F Aeolian          |

Table 10. *Buku Section I: mm. 1–72*

| Measures | Sample                                             | Texture/Performance Notes                                                                                         | Modality                                                     |
|----------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| 1–4      | “I don’t remember exactly”                         | Bass plays roots of chords; saxophone plays speech-like melody; sampled instrument echoes soloist one beat behind | G Dorian                                                     |
| 5–12     | “Buku of a horn”                                   | Motives based on syncopated speech rhythms; echo continues                                                        | F Dorian                                                     |
| 13–50    | Fragmented saxophone licks                         | As saxophone samples appear; solo material becomes increasingly more based on them; echo continues                | Bass roots: F, Bb, C, Db under mostly F Aeolian in saxophone |
| 51–72    | Rhythm section with saxophone, more complete ideas | Broken samples of rhythm section under soloist                                                                    | F Mixolydian walking bass, F blues in saxophone              |

Table 11. *Buku Section II: mm. 73–124*

| Measures | Sample                       | Texture/Performance notes                                | Modality                                   |
|----------|------------------------------|----------------------------------------------------------|--------------------------------------------|
| 73–86    | Fragmented saxophone samples | Mixed meter; saxophone plays directly with samples; echo | Bass roots: F, Bb, Db under Bb blues licks |
| 87–102   | Blues passages               | Saxophone plays directly with samples; echo              | Bass roots: F, Bb, Db                      |
| 103–118  | Blues passages               | Saxophone plays directly with samples; broken feel       | Bb blues                                   |
| 119–124  | Saxophone fragments          | Only saxophones are heard; echo                          | F Aeolian                                  |

Table 12. *Buku Section III: mm. 125–178*

| Measures | Sample                                                          | Texture/Performance Notes                     | Modality  |
|----------|-----------------------------------------------------------------|-----------------------------------------------|-----------|
| 125–132  | Occasional sampled fragments, mostly composed saxophone samples | Thin; legato; straight rhythms; echo          | F Aeolian |
| 133–142  | Saxophone wails, bass glissandi                                 | Thin; legato; straight rhythms, echo          | F Aeolian |
| 143–161  | Wails, bass plays descending pattern on long notes              | Thin; legato; straight rhythms, echo          | Gb Ionian |
| 162–178  | Sampled wails continue                                          | Syncopated ostinato returns over thin texture | F Aeolian |

Table 13. *Buku Section IV: mm. 179–222*

| Measures | Sample                                           | Texture/Performance Notes                                   | Modality                                   |
|----------|--------------------------------------------------|-------------------------------------------------------------|--------------------------------------------|
| 179–182  | “Buku of a Horn”                                 | Voice sample with saxophone echo                            | F Mixolydian                               |
| 183–194  | Similar material as measure 73                   | Saxophone plays directly with samples; echo                 | Bass roots: F, Bb, Db under Bb Blues licks |
| 195–222  | Virtuosic bebop lines, rhythm section in samples | Flurry of saxophone notes in unison or in round with sample | F Ionian, F Mixolydian (bebop)             |

Table 14. *Buku Section V: mm. 223–251*

| Measures | Sample                                                         | Texture/Performance Notes                             | Modality |
|----------|----------------------------------------------------------------|-------------------------------------------------------|----------|
| 223–227  | Fragmented scoops arranged to make up clidhé blues bass line   | Constant sixteenth notes with echo                    | Db blues |
| 228–239  | Fragmented scoops                                              | I-V bass pattern; echo remains in saxophone           | Db blues |
| 240–251  | Rhythm section, saxophone honking on Db along with blues licks | Thinning of previous texture; several samples at once | Db blues |



## APPENDIX B: RECORDINGS OF PIECES STUDIED

### *Garden of Love*

Masanori Oishi. *No Man's Land: Masanori Oishi Plays Jacob TV*. © 2015 by Zipangu. ZIP-0053.

Laura Venditti. *Electrosax*. © 2014 by 4-Tay. CD4044.

Arno Bornkamp. *Buku of a Horn: Arno B plays Jacob TV*. © 2009 by Basta Audio-Visuals.

Tim McAllister. *Pitch Black: Music for Saxophone by Jacob TV*. © 2007 by Innova. Innova/693.

Bart Schneeman. *It Takes Two*. © 2006 by Channel Crossings.

Ties Mellema. *Grab It!*. © 2006 by Amstel Records. AR005.

### *Buku*

Arno Bornkamp. *Buku of a Horn: Arno B plays Jacob TV*. © 2009 by Basta Audio-Visuals.

### *Pitch Black*

Aurelia Saxophone Quartet. *Heartbreakers*. © 2001 by Emergo Classics.

Prism Quartet. *Pitch Black: Music for Saxophone by Jacob TV*. © 2007 by Innova. Innova/693.

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